BRUHAT BANGALORE MAHANAGARA PALIKE

BBMP/2018-19/OW/WORK_INDENT34038

APPROVED SCHEDULE - B

No. E BTP/BBMP/E-PMT/18/2018-19, Date: 05.02.2019

Providing & Laying 600 mm RCC Sewerage pipeline from Elements Mall SWD to Thanisandra BBMP office (Near Railway Underpass) along Thanisandra main road coming under ward no. 06 Thanisandra, Byatarayanapura sub division.

Sl. No.	Approved Qty.	Description	Unit	Approved Tender Rates of DILIP T S ( )		
				In Figures		In Words
1	381.6	Cutting road surfaces for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc. in the classifications for:Asphalt Roadas per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	938.70	358207.92	Rupees Nine Hundred Thirty Eight and Seventy Paise Only
2	2671.2	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring, strutting, dewatering, etc. IN ALL KINDS OF SOIL MIXED WITH BOULDERS of 30 cms size, etc. for: Pipes of all dia. for depth upto 2.0 M in all types of soils Note : If any shoring and strutting, will be paid separately as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	175.35	468394.92	Rupees One Hundred Seventy Five and Thirty Five Paise Only
3	839.7	Pipes of all dia. for depth 2.0 to 4.0 M in all types of soils Note : If any shoring and strutting, will be paid separatelyas per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	236.25	198379.13	Rupees Two Hundred Thirty Six and Twenty Five Paise Only
4	534.24	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring, strutting, dewatering, etc. IN DISINTEGRATED ROCK, SOFT ROCK, SOFT SHALE AND MEDIUM HARD ROCK COMPRISING OF LIME STONE, SAND STONE, HARD SHALE, SCHIEST, FISSURED ROCK without resorting to blast etc. forPipes of all dia. for depth upto 2.0 M Note : If any shoring and strutting, will be paid separately as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work Considering 20% of Earth work Quantity	Cum	424.20	226624.61	Rupees Four Hundred Twenty Four and Twenty Paise Only
5	125.96	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring, strutting, dewatering, etc. IN DISINTEGRATED ROCK, SOFT ROCK, SOFT SHALE AND MEDIUM HARD ROCK COMPRISING OF LIME STONE, SAND STONE, HARD SHALE, SCHIEST, FISSURED ROCK without resorting to blast etc. foras per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	483.00	60838.68	Rupees Four Hundred Eighty Three Only

Signature of the contractor

Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Approved Tender Rates of DILIP T S ( )		
				In Figures		In Words
6	41.99	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring, strutting, dewatering, etc. IN HARD LATERITE ROCK CONTAINING IRON ORE ABOVE 20% BY CHISETELING AND TRIMMING TO PROPER SLOPE etc. for:: Pipes of all dia. Pipes of all dia. for depth 2.0 to 4.0 mtr as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work Considering 5% of Earth work Quantity	Cum	1082.55	45456.27	Rupees One Thousand Eighty Two and Fifty Five Paise Only
7	750	Providing and installing sheet piling for both sides of the trenches for following depths with mild steel sheets of not less than 6.5 mm thick, stronger knife edge, recessed spreader sockets, 3 inch single or double wall shields, to be designed by the contractor to withstand all types of soils, maximum depth as per the approved design drawings, including labour charges for installing and removing the sheet piling at various reaches of sewer line constructions, including loading, unloading, transporting to the suitable location etc. complete with all lead and lifts. (Measurement shall be taken for one side only even though it is provided for both sides).For depth 3.0 m to 6m and as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	SQM	836.85	627637.50	Rupees Eight Hundred Thirty Six and Eighty Five Paise Only
8	2005.45	REFILLING OF EARTH around pipelines, in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering all lead and lift including cost of all labour including consolidation by mechanical means approved by the Engineer in charge, when earth is at suitable moisture content with desired field density upto 95% maximum dry density (modified heavy proctor test) for restoration of roads without settlement including HOM of machineries, complete. (The contractor shall take care while consolidating the earth, so that, pipes laid are not damaged due to mechanical compaction and shall restore the damaged pipes at his own cost, in case of damage) etc. with: Approved earth available nearby, lead upto 100 M and lift upto 1.5 M. Note: In exceptional cases, earth may be obtained from borrow pit with extra lead, duly obtaining approval from the Chief Engineer (BWSSB SR 17-18 No. 14.1 Code:A095A) Page 56	Cum	108.15	216889.42	Rupees One Hundred Eight and Fifteen Paise Only
9	1499.36	Disposal off the excess excavated earth of all types by vehicle including loading, unloading with all lead and lifts, labour, HOM of machineries etc. for: Distance of 10 KM (BWSSB SR 17-18 No: 20.5. Code:A115E & F) Page 57	Cum	255.15	382561.70	Rupees Two Hundred Fifty Five and Fifteen Paise Only

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Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Approved Tender Rates of DILIP T S ( )		
				In Figures		In Words
10	1225.2	Supplying S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amendments using ordinary portland cement, for sanitary works and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials including cost of specials, perfect linking of joints with jack to correct position including cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey and will be paid extra for the same as per seperate item.: RCC NP3 Class pipe of 600 mm dia. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-	m	3265.50	4000890.60	Rupees Three Thousand Two Hundred Sixty Five and Fifty Paise Only
11	24	Providing and constructing "WIRE CUT BRICK MANHOLE CHAMBERS" using suplhate resistant cement, coNickel in shape attop, with CC 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15M alround the chamber. Construct Brick masonry in CM 1:4, 340 mm thick, with wirecut bricks of approved quality, plaster inside and out side with CM 1:3, 12 mm thick, except for the coNickel surface outside wherethe plaster thickness shall be 20 mm. Slope inside to be 1:6 in theconcrete towards central drain and finished smooth. Fixing of pipes in CC 1:2:4 with graded metal of 20 mm and down size. Supplying and fixing SFRC manhole frame and cover conforming to IS:12592 with latest amendment, in CC 1:2:4. Supplying and fixing footsteps made of 12 mm dia. steel bars (Fe-415) with 3 mm thick plastic encapsulation (IS-10910). The footsteps shall be fixed 30cms apart and on CC block embedded to masonry wall. The whole works include excavation in all types of soils, watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, de-watering, engraving manhole number with flow direction on the inner coNickel surface etc. as per the drawing etc. as per technical specifications and for the following diameters and depth etc. for:.	No	23379.30	561103.20	Rupees Twenty Three Thousand Three Hundred Seventy Nine and Thirty Paise Only
12	20.4	Providing and constructing "WIRE CUT BRICK MANHOLE CHAMBERS" using suplhate resistant cement, coNickel in shape attop, with CC 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15M alround the chamber. Construct Brick masonry in CM 1:4, 340 mm thick, with wirecut bricks of approved quality, plaster inside and out side with CM 1:3, 12 mm thick, except for the coNickel surface outside wherethe plaster thickness shall be 20 mm. Slope inside to be 1:6 in theconcrete towards central drain and finished smooth. Fixing of pipes in CC 1:2:4 with graded metal of 20 mm and down size. Supplying and fixing SFRC manhole frame and cover conforming to IS:12592 with latest amendment, in CC 1:2:4. Supplying and fixing footsteps made of 12 mm dia. steel bars (Fe-415) with 3 mm thick plastic encapsulation (IS-10910). The footsteps shall be fixed 30cms apart and on CC block embedded to masonry wall. The whole works include excavation in all types of soils, watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, de-watering, engraving manhole number with flow direction on the inner coNickel surface etc. as per the drawing etc. as per technical specifications and for	m	15389.85	313952.94	Rupees Fifteen Thousand Three Hundred Eighty Nine and Eighty Five Paise Only

Signature of the contractor

15/05

15/05

Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Approved Tender Rates of DILIP T S ( )		
				In Figures		In Words
13	9	Providing and constructing "WIRE CUT BRICK MANHOLE CHAMBERS" using suplhate resistant cement, coNickel in shape attop, with CC 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15M alround the chamber. Construct Brick masonry in CM 1:4, 340 mm thick, with wirecut bricks of approved quality, plaster inside and out side with CM 1:3, 12 mm thick, except for the coNickel surface outside wherethe plaster thickness shall be 20 mm. Slope inside to be 1:6 in theconcrete towards central drain and finished smooth. Fixing of pipes in CC 1:2:4 with graded metal of 20 mm and down size. Supplying and fixing SFRC manhole frame and cover conforming to IS:12592 with latest amendment, in CC 1:2:4. Supplying and fixing footsteps made of 12 mm dia. steel bars (Fe-415) with 3 mm thick plastic encapsulation (IS-10910). The footsteps shall be fixed 30cms apart and on CC block embedded to masonry wall. The whole works include excavation in all types of soils, watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, de-watering, engraving manhole number with flow direction on the inner coNickel surface etc. as per the drawing etc. as per technical specifications and for the following diameters and depth etc. for:.	No	38769.15	348922.35	Rupees Thirty Eight Thousand Seven Hundred Sixty Nine and Fifteen Paise Only
14	5.85	Providing and constructing "WIRE CUT BRICK MANHOLE CHAMBERS" using suplhate resistant cement, coNickel in shape attop, with CC 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15M alround the chamber. Construct Brick masonry in CM 1:4, 340 mm thick, with wirecut bricks of approved quality, plaster inside and out side with CM 1:3, 12 mm thick, except for the coNickel surface outside wherethe plaster thickness shall be 20 mm. Slope inside to be 1:6 in theconcrete towards central drain and finished smooth. Fixing of pipes in CC 1:2:4 with graded metal of 20 mm and down size. Supplying and fixing SFRC manhole frame and cover conforming to IS:12592 with latest amendment, in CC 1:2:4. Supplying and fixing footsteps made of 12 mm dia. steel bars (Fe-415) with 3 mm thick plastic encapsulation (IS-10910). The footsteps shall be fixed 30cms apart and on CC block embedded to masonry wall. The whole works include excavation in all types of soils, watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, de-watering, engraving manhole number with flow direction on the inner coNickel surface etc. as per the drawing etc. as per technical specifications and for	m	17022.60	99582.21	Rupees Seventeen Thousand Twenty Two and Sixty Paise Only
15	6	Providing and constructing "WIRE CUT BRICK MANHOLE CHAMBERS" using suplhate resistant cement, coNickel in shape attop, with CC 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15M alround the chamber. Construct Brick masonry in CM 1:4, 340 mm thick, with wirecut bricks of approved quality, plaster inside and out side with CM 1:3, 12 mm thick, except for the coNickel surface outside wherethe plaster thickness shall be 20 mm. Slope inside to be 1:6 in theconcrete towards central drain and finished smooth. Fixing of pipes in CC 1:2:4 with graded metal of 20 mm and down size. Supplying and fixing SFRC manhole frame and cover conforming to IS:12592 with latest amendment, in CC 1:2:4. Supplying and fixing footsteps made of 12 mm dia. steel bars (Fe-415) with 3 mm thick plastic encapsulation (IS-10910). The footsteps shall be fixed 30cms apart and on CC block embedded to masonry wall. The whole works include excavation in all types of soils, watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, de-watering, engraving manhole number with flow direction on the inner coNickel surface etc. as per the drawing etc. as per technical specifications and for the following diameters and depth etc. for:. as per the direction of	Nos	55791.75	334750.50	Rupees Fifty Five Thousand Seven Hundred Ninety One and Seventy Five Paise Only

Signature of the contractor

15/05

15/05

Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Approved Tender Rates of DILIP T S ( )		
				In Figures		In Words
16	2.7	Providing and constructing "WIRE CUT BRICK MANHOLE CHAMBERS" using suplhate resistant cement, coNickel in shape attop, with CC 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15M alround the chamber. Construct Brick masonry in CM 1:4, 340 mm thick, with wirecut bricks of approved quality, plaster inside and out side with CM 1:3, 12 mm thick, except for the coNickel surface outside wherethe plaster thickness shall be 20 mm. Slope inside to be 1:6 in theconcrete towards central drain and finished smooth. Fixing of pipes in CC 1:2:4 with graded metal of 20 mm and down size. Supplying and fixing SFRC manhole frame and cover conforming to IS:12592 with latest amendment, in CC 1:2:4. Supplying and fixing footsteps made of 12 mm dia. steel bars (Fe-415) with 3 mm thick plastic encapsulation (IS-10910). The footsteps shall be fixed 30cms apart and on CC block embedded to masonry wall. The whole works include excavation in all types of soils, watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, de-watering, engraving manhole number with flow direction on the inner coNickel surface etc. as per the drawing etc. as per technical specifications and for	m	17420.55	47035.49	Rupees Seventeen Thousand Four Hundred Twenty and Fifty Five Paise Only
17	1272	Conducting the level and strip of SURVEY of alignment of Main sewers of required diameter including all data required for generating GIS map of sewer network, preparation and submission of plan and LS with ground level at 30 M intervals and junction points along the centre line of the alignment etc. showing the right of way, any permanent features, culverts, branch sewer pipe etc. complete as per specifications and as directed by the Engineer in charge with all leadand lifts etc. complete for:: Sewer pipes above 300 mm dia. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	RMT	29.40	37396.80	Rupees Twenty Nine and Forty Paise Only
18	1272	Providing, erecting and removing casurina pole three tier BARRICADING using poles of 7.5 to 10 cms dia. and 1.5M height above ground fixed vertically at intervals of 2.0 to 2.5 M centre to centre and horizontally at 0.5M above ground level, including fixing poles in ground for a maximum depth of 0.3M and tied with coir rope firmly including cost and conveyances of all materials, labour, lead and lifts charges etc. complete. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	RMT	54.60	69451.20	Rupees Fifty Four and Sixty Paise Only
19	60	HC Water pumpset (3500 Ltr / Hr) as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Day	813.75	48825.00	Rupees Eight Hundred Thirteen and Seventy Five Paise Only
20	305.28	KSRB 2.8 : Providing and filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. specification No. KBS. Bedding for pipeline as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	2703.48	825317.46	Rupees Two Thousand Seven Hundred Three and Forty Seven Paise Only

Signature of the contractor

15/05

Executive Engineer

Sl. No.	Approved Qty.	Description	Unit	Approved Tender Rates of DILIP T S ( )		
				In Figures		In Words
21	450	Diversion of water course by providing Coffer dams or bunds or island as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complete. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work 37.41.2 -do- beyond 1.50 mts depth upto & including 3m depth.	Cum	438.52	197334.90	Rupees Four Hundred Thirty Eight and Fifty Two Paise Only
22	90	Dismantling size stone masonry in lime mortar/cement mortar and stacking the size stone and removing and disposing the debris with all lead & lifts etc complete including cost of all equipments and labour etc., complete as per specifications and as directed by the Engineer in charge as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work For Culver / Drains Crossings	Cum	191.44	17229.24	Rupees One Hundred Ninety One and Forty Three Paise Only
23	90	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6 stone hammer dressed in courses not less than 20 cms high, bond stones at two meters apart in each course including cost of materials, labour, curing with all lead and lifts, etc., complete as per specification and as directed by the Engineer in charge. -For Drain walls. Specification No. KBS 5.1.13 with using available stones as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	3452.13	310691.43	Rupees Three Thousand Four Hundred Fifty Two and Twelve Paise Only
24	305.28	KSRRB M400-6.1 : Construction of granular sub-base by providing close graded cushed stone aggregates of granite / trap / basalt material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method For Grading-II Material as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	2280.54	696202.34	Rupees Two Thousand Two Hundred Eighty and Fifty Three Paise Only
25	305.28	KSRRB M400-17 :Providing, laying, spreading and compacting 150mm graded stone aggregate to wet mix macadam (WMM) specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with pavers in sub base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density Grading of material clause: 406 of MORTH specifications. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	2101.34	641498.30	Rupees Two Thousand One Hundred One and Thirty Four Paise Only
26	1526.4	KSRRB 500-4 : Providing and applying primer coat for surfaces of medium porosity like cement stabilized soil base @ 1.10kg/sqmt over prepared surface with S.S. bitumen emulsion using bitumen taker fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Sqm	48.97	74750.86	Rupees Forty Eight and Ninety Seven Paise Only

Sl. No.	Approved Qty.	Description	Unit	Approved Tender Rates of DILIP T S ( )		
				In Figures		In Words
27	61	Providing and Laying Semi dense bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finished to the the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specification Clause No 508 complete in all respect complete as per specifications. Using 100-120 TPH capacity H.M.P with sensor paver grading-I (35-40mm) with 4.5% NRMB 70 / PMB 70 Grade as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	10070.42	614295.86	Rupees Ten Thousand Seventy and Forty Two Paise Only
28	1526.4	KSRRB 500-27 : Providing and laying open graded premix carpet of 20mm thick on prepared surface in a single course as wearing course including composed of 11.2 mm and 13.2mm size stone aggregates 0.027 cum / sqm premixed with bituminous binder at 1.46kg / sqm in mini hot mix plant 6-10 tonne capacity laying manually rolling with power roller 8-10 tonne, excluding cost of tack coat, including cost of all materials, labour, HOM of machineries complete as per specificationsusing VG 10 (80/100) grade. MORTH clause No. 511/Chapter 5 as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Sqm	154.71	236144.76	Rupees One Hundred Fifty Four and Seventy Paise Only

Signature of the Contractor

15/05

Executive Engineer
Byarayanapura Division
BBMP, Bangalore - 92

15/05